



THE URBAN WOOD TOOLKIT

BULLETIN 4: ESTABLISHING AN URBAN LOG COLLECTION AND SORTING YARD

NEW OPPORTUNITIES FOR WOOD RECOVERY AND REUSE

An urban or community tree has value at every life stage, including in the form of a log. Instead of thinking of removed trees as waste products to dispose of, communities across the country are prioritizing urban wood utilization and diverting valuable resources away from the waste streams and back into the local economy.

This bulletin, the fourth in a series designed to provide tools for communities considering an urban wood use program, explains specifications for establishing a municipal log collection and sorting yard. A log collection and sorting yard is a location where logs, branches, and other urban forest products can be brought after removal for aggregation, sorting, and trimming prior to processing, sales, or proper disposal. These yards provide community foresters or wood managers with the space necessary to manage and utilize all of the wood materials generated by a community and are a helpful first step toward finding higher value uses for wood from removed community trees.

Sorting community wood materials prior to processing helps ensure that high value products can be diverted to higher value markets rather than lumped into a single, more general use where the potential value is likely less (Dramm, 2002). For example, more value can be obtained by sorting out saw logs from pulp wood, or high quality butt logs from low quality logs. Additionally, wood materials that should not be mulched or composted can easily be separated from those that can be.

LOG COLLECTION AND SORTING YARDS VS. LOG LANDINGS

A log collection and sorting yard is a permanent location that is continuously utilized for aggregation and processing. A log landing is a temporary location used for sorting, log decking, and wood materials storage before transportation to a log yard. Log landings can also be used by community foresters or wood managers when a large quantity of wood is being generated in a specific area (e.g. removals from a community park or a municipal timber tract for expanded urban development). Either as a permanent operation or a temporary site, these collection areas help minimize transportation costs of wood material by storing it until a full load of wood is accumulated.

Permanent log sorting and collection yards are a common management tool used by timber producers and resource managers as a way to maximize profits and promote more accurate grading, scaling, and sorting. Log sorting and collection yards have gained in popularity recently among urban and municipal foresters and wood managers as states adopt waste reduction goals and implement new policies that restrict certain wood residues from entering landfills. The goal of a community log collection and sorting facility is to improve the quality and productivity of a municipality to process, utilize, and market urban wood and wood residues.

PLANNING AND ESTABLISHING A LOG COLLECTION & SORTING YARD

Wood Handling and Storage Regulations: It is important to understand all local, state, and federal regulatory requirements including site selection regulations, surface and groundwater regulations, permit applications, and acceptable accumulation and storage duration specifications that may affect the planning and implementation of an urban log sorting and collection facility. Michigan's Department of Environmental Quality promotes the



following preferences for residue handling: first, avoid waste generation, then utilize generated waste for beneficial purposes, and finally, properly dispose of what remains. (Similar guidance exists in other states as well.) Laws and regulations are continually being updated and changed in order to better implement these preferences. Although many communities treat municipal wood as a waste product, it is actually considered a “source separated material.” A source separated material can be separated and converted into raw materials or a new product, including but not limited to, compost. See Urban Wood Toolkit Bulletin #6 for links to more detailed wood handling and storage requirements and regulations.

Co-Locating with Other Logistics: Depending on availability, it may be advantageous for a municipality to co-locate the log collection and sort yard with other wood processing and storage activities. For example, a drum grinder located on site would allow otherwise non-viable debris and damaged/punk logs to be mulched, and for efficiency, a mulch storage area could logically be located within this same accessible secure area. Additionally, the storage for recycled asphalt/concrete and other viable bulk items like salt for the winter road crews could all be stored at the same site, reducing the need for multiple secure areas.

Size: The size of a log collection and sort yard is highly dependent on the volume of wood materials and logs to be handled and other complementary operations that may occur in this designated area (ex: mulch storage). According to a review of current log sort yard operations in the United States, researchers concluded that a medium-sized log sort yard facility should be approximately five acres in size for processing and sorting (Dramm, 2002). This estimate does not account for log decking or other storage needs. Whenever determining the facility size, consider transportation logistics, including space for a log truck turn-around, and equipment staging and storage. Additionally, when determining the yard size, consider how this project may grow and what expansion and storage needs you may have in the future.

Location & Accessibility: Many factors should be considered when determining a location for a log collection and sorting yard:

- Consider a choosing a site that will hold up under continued use by heavy equipment.
- Avoid establishing your log collection and sorting yard on or adjacent to any sensitive areas, such as riparian management zones, waterways, or other natural features.
- Contact local utility companies to ensure there are no conflicts or issues with the selected area.
- Consider aesthetics when planning log landings next to roadways and other visually sensitive areas.
- Consider establishing a yard on a road that is exempt for seasonal and/or other weight restrictions.
- Visibility and traffic should also be considered when determining the yard accessibility.
- Review all regulatory site-selection requirements, including local ordinances and zoning for limits restricting processing activities or equipment usage.
- When possible, consider a centrally located facility that would be accessible for the entire service area.

Depending on current practices and land availability, a log collection and sorting yard might be better suited on private land. For instance, a local mulch and compost producer may be willing to establish a sorting and storage facility on their property if they are allowed access to certain wood residues. These partnerships can be beneficial and may prove easier to obtain in the short term when compared to establishing a city-run yard.

Safety: Safety should always be the number one priority when considering your wood management options. Logs and other forest products are heavy, movable, and potentially dangerous. The Occupational Safety and Health Administration (OSHA) produced regulations pertaining to safety in logging operations, along with other safety information. These regulations include log loading and unloading procedures 1910.266(h)(6), transportation procedures, 1910.266(h)(7) and storage procedures 1910.266(h)(8). Complete [OSHA Logging Operation](#) procedures can be found online.



Security: Without clear communications, a log collection and sorting yard may be mistaken as a public dump or waste disposal site for wood. To ensure the safety of the community, consider posting clear and informative signage, gating all points of entry, staffing the facility, and/or periodic policing.

Sorting and Evaluation: In a log collection and sort yard, professionals can “grade” or separate logs for commodity or niche markets. Sorting is typically dependent on 1) species, 2) potential products (for example, pulpwood and sawlogs), and 3) other market requirements. Ideally, all higher quality sawlogs, which could potentially be sold to log buyers or sawyers, should be sorted and stored separately from the other materials. However, keep in mind, while knowledge of traditional log grading practices is useful, it is not necessarily required to market urban logs. Always consult the prospective buyer for their preferred specifications on how materials should be separated and/or stored.

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